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EXAMINER	
NGUYEN, CUONG H	
ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/821,423	WALTERS ET AL.	
	Examiner	Art Unit	
	CUONG H. NGUYEN	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/06/08 (2ND REPLACEMENT APPEAL BRIEF)*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is the answer to the communication received on 2/06/2008, which papers have been placed of record in the file.

2. Claims 1-45 are pending in this application.

Response to Arguments

3. The final Office Action, and the Advisory Action mailed on 6/22/2007 are withdrawn; the examiner submits a new reference for 35 USC 102(b) rejections that proves what the applicant claims are not his own intellectual property for a protection.

At first, the examiner submits that independent claims 1, and 15 are very broad, they claim about steps using both a GPS and a dead reckoning module to get a navigation's position (note that these two claims contain STEPS do not say/require that both means/modules/devices MUST BE PHYSICALLY INTEGRATED – just broadly CLAIMING that these two are "communicate" – the examiner submits that two separate means can EASILY be communicated). The examiner submits that cited references meet what the applicant claims.

Since claim 41 was not "explicitly" given an opinion (as argued), the examiner withdraws the Final Office Action mailed on 4/05/2007; however, the examiner already gave his opinion on claim 41 via the rationales provided for rejections of claim 42-45, and reflecting that interpretation of claim 41 as 2 devices are in 2 separate housings: in that interpretation, claim 41 is very well-known as an electronic apparatus contains at least 2 devices (as an easy-to-recognized example, a pointer device on a computer can be a keyboard (using UP, DOWN, LEFT, RIGHT arrow keys), and/or a mouse for the same moving function (by seeing a displaying cursor of the mouse); a TV remote control has 2 separate housings: one housing to contain electronic chips, and circuitries that sending remote signals, and one

housing only contains batteries; they are "integrated" on that TV remote control – therefore, integrating different components/modules/parts/devices in a system are not new; leave alone other particular/specific application(s) of that claimed device); therefore, coming back to claiming a device with 2 integrated modules: a dead-reckoning module and a GPS module (performing triangulated functions) knowing that these 2 modules are available; the examiner's position is putting these 2 together on a device is not an inventive concept.

4. On page 23, 2nd para., the applicants argue that « … Smith fails to suggest calibration…", the examiner submits that it is obvious that Smith suggests calibrating task for his system as applicants claiming about calibrating their system (by identify erroneous positional data… and eliminate such error" (admitting a task of (checking and/or comparison) has been made, see paper 5/3/07, page 23, line 10-11).

5. On page 24, 1st para., applicants argue about "…not only are GPS and dead reckoning functions separated, so too are the storage and display of navigation data." The cited references show functions are separated, and storage, and display are in separate modules.

6. On page 24, lines 17-19, the examiner's position is at the time of invention, retrieving data form one place, and displaying said data in another place is not new (as claim 12).

7. Applicants' arguments (5/02/2007) have been fully considered but they are not persuasive according to broad pending claims; since 2 devices (a triangulation positioning, and a dead reckoning positioning devices) can be separated as claimed; prior art already taught about each separately (and communications of those electronic devices are known); therefore, putting/integrating them together on a same chassis/platform for complementing each own functionalities is not an inventive concept. Claims 1, 15, and 23 are the broadest claims; they only suggest of using 2 devices (a 1st step is using a

1st device with a triangulation positioning functionality, a 2nd step is using a 2nd device with a dead reckoning positioning functionality/(a distance determining and a compass), and a 3rd step is locating a position using those 2 devices – using these 2 devices to locate a position are already well-known). The languages do not involve an inventive concept; therefore, the examiner needs to maintain previous rejections.

8. Applicants argue that the prior art does not teach "providing a second mobile device to communicate with the first mobile device and physically separable therefrom, the second mobile device including a dead reckoning functionality that includes an orientation component and a distance component. However, in claim 1 there are only required that 2 devices that can wirelessly communicate to each other (e.g., a communication of 2 stations on earth, or between 2 ships in Atlantic Ocean, etc.). Claim 1 does not require that the second device is a mobile device; and said second device not only require just a dead reckoning functionality (by using an open-ended word "including"). When arguing about a dead reckoning device, and a triangulation positioning functionality device, the applicants argue that they must be physically separable (see pending claims 1, 10, 15, and 23); however, the examiner respectfully submits that the language of pending claims 31, and 37 do not express that idea. Further, making 2 devices integral or not has been a matter of choice because it has long been known that this is NOT an inventive concept to put 2 devices together or separate (the examiner disagrees because the applicant argues that 2 devices are separate (they MUST "communicate" to each other directly/indirectly and/or wire/wireless in the claimed "system"). The constituent parts are so combined as to constitute a unitary whole. Webster's New International Dictionary (2nd edition) defines "integral" as "(2) composed of constituent parts making a whole; composite; integrated." In this pending application, all of the essential elements of the pending claims except integration

of parts are found in the cited references. In arguing claims 37-39, the reason applicant uses is merely an intent of use (such as for best results).

The examiner submits that independent claims are vague when using the term "communicate"/"communication" since this term is very general in all kinds of communication between different parties (e.g., mailing communication, telephone communication, wire/wireless communication; therefore, that term is not precisely clear in claims 1, 10, 15, and 23, 31.

Claim 23 has a gap between structural components when not comprising a transceiver in each device to transmit and receiving signals (comparing to independent claim 31, lines 2 and 4). All dependent claims are rejected because they incorporate that same limitation from their parent claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:
A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, and 15 are rejected under 35 U.S.C. § 102(b) as being anticipate by Nelson, Jr. (US Pat. 5,890,090).

The examiner submits that independent claims 1, and 15 are very broad, they claim about steps using both a GPS and a dead reckoning module to get a navigation's position (note that these two claims contain STEPS do not say/require that both means/modules/devices MUST BE PHYSICALLY INTEGRATABLE – just broadly say that these two are "communicate" – the examiner submits that

two separate means can still be easily electronically communicated). The examiner submits that Nelson Jr. meets what the applicants claim in claims 1, and 15 – see Nelson, Jr. figure 2 refs. 34 and 44).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-2, 7-8, 10, 12, 17-22, and 37-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson, Jr. (US Pat. 5,890,090), Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544).

A. As per claims 1, 10, 17-22, and 37-40, Turetzky also teaches:

- providing a handheld navigation device, a navigation device and an integral display (column 4, lines 59-67);

- providing a second navigation device to communicate with the first navigation device, the second navigation device including a dead reckoning positioning component including a compass (see Turetzky et al., col. 4, lines 59-64, and col.3, lines 25-27);

- resolving a position of the first and the second navigation devices, wherein resolving the position includes using the one or more dead reckoning positioning components to determine the position when the triangulation positioning functionality is interrupted ((see Turetzky et al., col.3, lines 3842).

Turetzky does mention the use of an odometer.

Turetzky does not mention the use of triangulation; however, a GPS device inherently uses that triangulation feature – see Nelson, Jr. fig. 2, refs. 34, and 36).

However, Hakala et al. also use that triangulation function (see Hakala et al., claim 3).

It is also obvious to one of ordinary skill in the art that any navigation system needs at least three satellites (triangulation) to work properly in the position detection (applicants disclosure -page 1, lines 27-28, page 2, lines 1-11, page 3, lines18-22). Further it is obvious that the PDA used by the prior art has a display device as claimed.

Turetzky et al. do not expressly disclose that the second device communicating to the first device, said 2nd device is separate from the first device.

It would have been obvious to one of ordinary skill in the art at the time this invention was made to combine Nelson Jr., Turetzky et al and Hakala et al in order to provide a claimed method with using both a dead reckoning device, and a triangulation positioning device to get a location of those devices since a user can conveniently obtaining reliable results when necessary.

B. As per claims 2 and 7, Turetzky also teaches about providing a handheld "multifunction" device selected from a PDA device and a cell phone (see Turetzky et al., col. 4, line 59-67).

C. As per claim 8, it has been a well-known feature that a navigation system displaying a position of a device, which has an antenna receiver.

D. As per claim 12, it would have been obvious to one of ordinary skill in the art that any related data can be obtained from a place/vehicle that uses a navigation system.

E. As per claims 41-45, they teach that above devices (a first electronic device, and a second electronic device) can be separated (claim 41 merely indicates that a 1st device, and a 2nd device are separable), and they may use cradles; these claimed steps are very well-known in many electronic

apparatuses due to their integration's characteristics; therefore above rationales and references are again applied.

11. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson, Jr. (US Pat. 5,890,090), Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544).

A. As per claims 3 and 4, Nelson Jr., and Turetzky do not expressly teach a PDA having an integrated compass.

However, Hakala teaches it in column 11, lines 21-23.

Therefore, it would have been obvious to one of ordinary skill in the art at the time this invention was made to combine Nelson Jr., Turetzky et al and Hakala et al in order to provide a portable map viewing/device capable of indicating the current location having directions of a user.

B. As per claim 5, neither, Nelson Jr., Turetzky nor Hakala teaches the portable device including a rate gyro. However, Hakala teaches the integrated compass that performs the claimed functions. Therefore, it would have been obvious to one of ordinary skill in the art at the time this invention was made to use cited references to substitute any means for another means (i.e., an integrated compass) in order to reduce costs, and may improve functionalities.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson, Jr. (US Pat. 5,890,090).Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544), and further in view of Horvitz et al (US Pat. 6,601,012).

Nelson Jr., , and Turetzky does not teach a PDA having an accelerometer.

However, Horvitz teaches that a PDA having an accelerometer (see Horvitz, col. 10, lines 40-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time this invention was made to combine Nelson Jr., ,Turetzky et al., Hakala et al., and Horvitz et al in order to provide a portable map having an accelerometer capable of indicating the current location of the user.

13. Claims 9, 13-16, 19-22, and 23-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson, Jr. (US Pat. 5,890,090).Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544), and in view of DeLorme et al (US Pat. 6,321,158).

A. As per claims 9 ands 34, Nelson Jr., and Turetzky does not expressly disclose that the PDA performing a route calculation (see Turetzky, "A cellular telephone or other mobile device can display, either visually or otherwise, the user's location, the user's location on a map, a route or part of a route between the user's location and the desired destination, or any number of things that can be used for location services.").

However, DeLorme also teaches it in abstract.

Therefore, it would have been obvious to one of ordinary skill in the art to combine Nelson Jr., , Turetzky et al , Hakala et al., and DeLorme et al in order to provide a portable map/a PDA with route calculating capabilities for conveniences of using a device with many different functionalities.

B. As per claims 13 and 14, Nelson Jr., , and Turetzky do not expressly teach waypoints, planned route or points of interest.

However, DeLorme suggests a device with those functions in column 10.

C. As per claims 15, 23, 26, 30-33, 35 and 36, Turetzky also teaches:

- providing a first handheld navigation device, the first navigation device and an integral display (see Turetzky, col. 4, lines 59-67);

- providing a second navigation device to communicate with the first navigation device, the second navigation device including a dead reckoning positioning components (see Turetzky, col. 4, lines 59-64 and col. 3, lines 25-27);

- resolving a position of the first and the second navigation devices, wherein resolving the position includes using the one or more dead reckoning positioning components to determine the position when the triangulation positioning functionality is interrupted (see Turetzky, col. 3, lines 38-42).

Turetzky does not expressly mention the use of triangulation.

However, Hakala et al. use that function (see Hakala et al., claim 3).

It is also obvious to one of ordinary skill in the art that any navigation system needs at least three satellites (triangulation) to work properly in the position detection (applicant's disclosure -page 1, lines 27-28, page 2, lines 1-11, page 3, lines18-22). Further it is obvious that the PDA used by the prior art has a display device. Turetzky does teach including the navigation data including cartographic data including a number of locations and data indicative of thoroughfares of a plurality of types.

DeLorme also teaches that limitation in column 10.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to combine Nelson Jr., Turetzky et al., and DeLorme et al. in order to provide a portable map viewing capable of indicating the current location of the user.

D. As per claim 16, the rationales and references for above rejections are incorporated.

DeLorme also teaches that using two different devices to communicate with one another. in column 8, lines 60-64.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to combine Nelson Jr., Turetzky et al., and DeLorme et al. in order to provide a portable map viewing capable of indicating the current location of the user.

E. As per claim 24, it would have been obvious to one of ordinary skill in the art to use a rate gyro or accelerometer in a navigation system in order to be more accurate (this feature is from a background of applicant's disclosure -page 10, lines 8-13).

F. As per claim 25, it would have been obvious to one of ordinary skill in the art to have at least a dead reckoning including at least an odometer, a speedometer, a differential wheel sensor and a compass in order to work properly (this feature is from a background of applicant's disclosure -page 3, lines 8-22).

G. As per claim 27, Nelson Jr. and Turetzky do not expressly disclose the PDA performing a route calculation. However, DeLorme teaches it in abstract. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned references in order to provide a portable map viewing capable of indicating the current location of the user.

H. As per claim 28, Turetzky also teaches providing a handheld multifunction-device selected from a group of a PDA enabled device and a cell phone enabled device (see Turetzky et al., col. 4, lines 59-67).

I. As per claim 29, it obvious to one skill in the art to use the PDA to communicate wirelessly to any other device in order to provide flexibility to the user – this is a PDA's function.

J. As per claims 37-38, and 19-20:

The examiner respectfully withdraw the allowance subject matter of claims 37-40 (given by a prior examiner) with the above reason for "includes a cradle for a device", and using "software" for these 2 devices (software/firmware already embedded/programmed in those devices' ICs). Claiming that using "software" and "cradle" for electronic devices are not inventive concepts – knowing that a cradle can hold a device on a surface, and charging power to that device at the same time.

a. Per claims 19, and 37: Claims 19, 37 contain those extra well-known features suggested by prior art (what claim of using a 2nd device is merely a dead-reckoning device; note that "including a cradle" does not change/effect anything to the claimed steps of a method claim 37 – motivation is similar as in claims 37-38, and 19-20).

b. Per claims 20, and 38: Claims 20, 38 are merely suggested a selection of 2 available devices to have a better data (about measuring a position). This claim only requires to recognize/determine which device to use from the two: a dead reckoning device, and a triangulation positioning device. A very well known step of YES or NO is merely required from a user for "selection" – if a driver is in an underground garage, he would use a dead-reckoning; if he is on a highway, he uses a triangulation device.

c. Per claims 21, and 39: Claims 21, 39 are merely confirmed what happens in claim 37; as best interpreted, it is a duplication of its parent claim (claim 37). In another word, this claim merely requires the use of a triangulation positioning device, and a dead reckoning device (producing dead reckoning data). Therefore, similar rationales and references are applied.

d. Per claims 22, and 40: Claims 22, and 40 are merely required further limitations of "tracking a device's location" (e.g., a current location of a vehicle), and "providing visual and audio route

guidance" (i.e., a GPS screen); these limitations are already very fundamental in the claimed vehicle navigation field using a GPS device.

14. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson, Jr. (US Pat. 5,890,090), Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544), further in view of Smith et al. (US Pat. 6,374,179).

The rationales and references for a rejection of claim 10 are incorporated.

The applicants further claim that using one of the triangulation positioning and dead reckoning positioning functionalities to check/adjust/calibrate (see Webster's II New College Dictionary for a definition of calibration) the other one of the triangulation positioning and dead reckoning positioning functionalities.

Turetzky et al. disclose: "*Such a check block can have one characteristic of the signal checked, can have multiple characteristics to check, or can select from one or more characteristics to be checked, either automatically or manually selected, depending on the design or desires of the user.*" (see Turetzky et al., col. 6 lines 21-25); this "check" clearly suggests a signal check for cross/auto-correlation between devices.

Turetzky et al. do not disclose that 2 claimed devices can calibrate each other.

However, Smith et al. clearly discloses that: *"As shown in FIG. 7, when an application 212 is brought on-line or made active, it registers with position service module 202 by sending request position session module signal 302 to position service module 202. In effect, application 212 is requesting composite of position data 240 from position service module 202. In request position session module signal 302, application 212 can include position data criteria (i.e. "special needs"), for example, application specified*

frequency of updating of position data, application specified accuracy of position data, *type of position data, one or more components of composite of position data, resolution of composite of position data,* position data from one or more particular navigational position sources 208, and the like." (see Smith et al., col. 6 line 66 through col. 7 line 11); this disclosure already suggests a calibration of a component by selecting another available component as standard.

It would have been obvious to one of ordinary skill in the art at the time this invention was made to combine Nelson Jr., Turetzky et al., Hakala et al., and Smith et al. using one of the triangulation positioning and dead reckoning positioning functionalities to adjust the other one of the triangulation positioning and dead reckoning positioning functionalities for the advantage of using these available and well-known technologies to supplement each other (triangulation positioning and dead reckoning technologies) to always have a good compatible and backup device.

Conclusion

15. Pending claims are not patentable.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose tel. number is 571-272-6759 (email address: cuong.nguyen@uspto.gov). The examiner can be reached on 9:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THOMAS G. BLACK can be reached on 571-272-6956. The Rightfax number for the organization where this application is assigned is 571-273-6759.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Please provide support, with page and line numbers, for any amended or new claim in an effort to help advance prosecution; otherwise any new claim language that is introduced in an amended or new claim may be considered as new matter, especially if the Application is a Jumbo Application.

/Cuong H. Nguyen/
Primary Examiner, Art Unit 3661